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Dated 1/2/2008

Reply to Office Communication of 12/27/ 2007

page 2 of this paper consisting of a total of 17
sheets.

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Remarks begin on page 17 of this paper.

The proposed amendments to the claims 1-2 will
replace all prior versions of the claims 1-2 in said
application.

The proposed amendments to the claim 1 to be sent to
Primary examiner Dr. Lori A. Clown by the fax of
December 12, 2007 comprising:

Claim 1 (currently amended): A multiparameter
method of ~~screening for the diagnosis, the prevention~~
~~or the treatment evaluating disease risk, disease~~
~~cause, therapeutic target, and therapeutic efficiency~~
of atherosclerosis-related coronary heart disease
(CHD) or stroke comprising;

defining the disease as atherosclerosis-related
CHD or stroke, ~~or other cardiovascular disease;~~

defining the normal as free from said disease;

defining the following parameters as
atherosclerotic parameters consisting of c =

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the Low-density lipoprotein (LDL) concentration parameter in mg/dL or c = the C-reactive protein (CRP) concentration parameter in mg/L, p = the blood systolic pressure parameter in mmHg or p = the blood diastolic pressure parameter in mmHg, f = the heart rate parameter in s^{-1} , a = the radius parameter along arterial radius in cm, T = the temperature parameter of blood plasma in $^{\circ}C$, α = the angle parameter between gravity and the mean velocity of blood fluid in arterial vessels in degree and z = the axial position parameter of diffusion flux along the inner wall in the axial direction of arterial vessels in cm, called the diffusion length parameter;

^{values} ~~measuring, for an individual having the measured~~
^{of values of disease,} said atherosclerotic
^{parameters} ~~parameters~~ ^{using} the following expressions: for an individual

$$J = A c^{\frac{11}{9}} (v^3 D^{16})^{\frac{1}{27}} \left(\frac{g \cos \alpha + f u}{z} \right)^{\frac{2}{9}} \quad (1.1)$$

or

$$J = B c^{\frac{11}{9}} p^{\frac{1}{3}} T^{\frac{16}{27}} a^{\frac{2}{3}} f^{\frac{2}{9}} z^{-\frac{2}{9}} \quad (1.2)$$

and

$$J = E c^{\frac{11}{9}} D^{\frac{16}{27}} z^{-\frac{2}{9}} (\cos \alpha)^{\frac{2}{9}} \quad (1.3)$$

wherein J = the mass transfer flux in 10^{-3}

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$g/(cm^2s)$, A, B and E = the constants of conversion factors, v = the eddy velocity of blood fluid in arterial vessels in cm/s, u = the mean velocity of the blood fluid in cm/s, D = the diffusion coefficient in cm^2/s , and g = the gravitational acceleration in cm/s^2 ;

~~the measuring, for an individual not having the~~
~~OK disease, the normal values of said not the~~
~~atherosclerotic parameters;~~
disease

determining the disease risks yielded by the difference between said measured values and said normal values of said atherosclerotic parameters;

adding all said disease risks ~~together yields~~
containing a total risk of said disease;

determining a disease risk level containing said total risk of said disease;

~~selecting an atherosclerotic risk factor related to an atherosclerotic parameter that is the greatest contribution to said total risk of said disease so as to result in said risk~~

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factor as a primary therapy target of said disease;

selecting a greater flux between the LDL mass transfer flux and the monocyte mass transfer flux so as to result in said greater flux as a primary cause in said disease;

selecting a greater concentration level between the LDL level in serum and the CRP level in blood plasma so as to result in said greater level as a secondary therapy target of said disease;

determining a relative ratio between currently said total risk and previously said total risk so as to yield said relative ratio as a therapeutic efficacy of said disease;

repeating above-mentioned said methods until said disease risk level is reduced to a normal level for said individual who requires the therapy to prevent or to treat atherosclerosis-related CHD or stroke;

above-mentioned said methods are written as an executable computer program named the MMA.exe,

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or another name, to be installed into a general purpose digital computer device to accomplish said methods; and

~~to output outputting a result of said methods
said total disease risk, disease cause,
therapeutic target and therapeutic efficiency
to a display or a memory or another computer on
a network, or to a user or a display.~~

The proposed amendments to the claim 2 to be sent to Examiner Mr. Jason M. Sims by the fax of December 10, 2007 comprising:

Claim 2 (Currently amended): A method as in claim 1, wherein the nine disease risks are yielded by the differences between the measured values and the normal values of the nine atherosclerotic parameters, *wherein:*
~~said method comprising the steps of:~~ ^ ^

Substituting ^ a measured value, c_m , in mg/dL, of the individual's LDL concentration in human serum, which is determined using a medical technique for ^ ^ measuring the concentration of blood constituents or said c_m is determined by the physician, into eq. 1.1 yields $J_m = H c_m^{1/4}$ where

$$H = A C_v^{3/4} 10^{1/27} \left(\frac{2 \cos \alpha + \sin \alpha}{2} \right)^{2/9}$$

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substituting \wedge a normal value, c_n in mg/dL, of said LDL concentration is determined by the physician or said $c_n = 100$ mg/dL for adult, into 1.1 yields $J_n = H c_n^{1/5}$

calculating $\frac{J_m - J_n}{J_n}$, where J_m yielded by substituting said c_m into said equation (1.1) and J_n yielded by substituting said c_n into said equation (1.1), yields:

$$R_1 = \left(\frac{c_m}{c_n} \right)^{1/5} - 1 \quad \frac{J_m - J_n}{J_n} \quad (1)$$

~~substituting said c_m and said c_n into the following expression (1) where $c_m \geq c_n$ and~~

calculating (1) yields the disease risk R_1 caused by the LDL concentration parameter related to the atherosclerotic risk factors being an elevated LDL concentration in human serum, high-fat diet, hypercholesterolemia or other risk factors that increase said LDL concentration;

substituting \wedge a measured value, C_m in mg/L, of the individual's CRP concentration in human blood plasma, which is determined using a medical technique for measuring the concentration of blood

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constituents or said C_m is determined by the physician, into 1.1 yields $J_{m2} = H C_{m2}^{1/4}$ where $H = A C_v^{3/16} D^{1/16} \left(\frac{3 D_v + 4}{2} \right)^{1/2}$

substituting a normal value, C_n in mg/L, of said CRP concentration and an equivalent factor, F , are determined by the physician wherein $F = \left(\frac{D_v}{D_c} \right)^{1/6}$, D_c = the CRP diffusion coefficient and D_v = the LDL diffusion coefficient or said $C_n = 1.0$ mg/L for adult and said $F = 0.66$, into eq. (1.1) yields $J_{n2} = H C_{n2}^{1/4}$ and

calculating $\frac{J_{m2} - J_{n2}}{J_{n2}}$, where J_{m2} yielded by

substituting said C_m into said equation (1.1) and J_{n2} yielded by substituting said C_n into said equation (1.1), yields:

$$R_2 = F \left(\left(\frac{C_m}{C_n} \right)^{1/4} - 1 \right) \frac{J_{m2} - J_{n2}}{J_{n2}} \quad (2)$$

substituting said C_m , said C_n and said F into the following expression (2) where $C_m \geq C_n$ and

calculating (2) yields the disease risk R_2 caused by the CRP concentration parameter related to the atherosclerotic risk factors being an elevated CRP level in human blood